



THE COMMONWEALTH OF MASSACHUSETTS
WATER RESOURCES COMMISSION

100 Cambridge Street, Boston MA 02114

Meeting Minutes for April 8, 2004

Members in Attendance:

Karl Honkonen	Designee, EOE
Marilyn Contreas	Designee, DHCD
Cynthia Giles	Designee, DEP
Gerard Kennedy	Designee, DAR
Mark Tisa	Designee, DFG
Joe McGinn	Designee, DCR
Joe Pelczarski	Designee, CZM
Matthew Rhodes	Public Member

Others in Attendance:

Mike Gildesgame	DCR
Linda Marler	DCR
Michele Drury	DCR
Vicki Gartland	DCR
Margaret Kearns	Riverways
Sara Cohen	DCR
Ron Sharpin	DCR
Pam Heidell	MWRA
Sarah Laverty	CRWA
Kellie O'Keefe	DEP NERO
Ted McIntire	Town of Reading DPW
Peter Tassi	Town of Reading DPW
Gina McCarthy	OCD

Agenda Item #1: Executive Director's Report

Marler provided an update on the hydrologic conditions:

- March was a deficient month for rainfall. Only about 66% of normal was received statewide. This is the third month in a row with deficient rainfall. The three-month percentage of normal is 55% statewide. The months of January, February, and March were in the lowest 10th percentile for precipitation for the period of record. This was last experienced in the 1800's. The six-month numbers still look good because of the heavy snowstorm which fell in December. The twelve month numbers are still in good shape, as well. Things changed once April began. During the first few of days of April, 2.4 inches of rain fell. This was enough to alleviate drought concerns for the time. If it does not rain for the next few weeks,

this will be a concern; however, the forecast is predicting a large amount of rain early next week.

- There was some minor flooding statewide, in response to the early April rain event. USGS estimated the recurrence intervals for those floods: a 1-yr flood on the Hoosic River and a 25-year flood on the Aberjona, which is on the North Shore, an area which received more rain.
- Ground water levels as of March 31st were below normal in eastern part of state. If more rain was not predicted, drought thresholds would start to be triggered, however, it does not appear that this will happen.
- Streamflow for the month of March was below normal, statewide. Had these conditions continued, the drought management task force would be convened. There was a normal range of flows in early March. This receded to below normal by the end of the month, but with the early April rain, streamflow spiked up to about normal, but it is now receding. USGS hydrographs show that flows are recovering to a higher level, so these storms have been beneficial.
- Water supply reservoir levels had been below normal, but last week's storm has changed that. Some were overflowing after these events, while some are above normal levels for this time of year. This will be beneficial going into the summer demand period.
- Fire danger levels went down due to the recent rain events. The forecast for the next ten days is for frequent rain events. This should keep fire danger levels low.
- The Drought Mitigation Center shows Massachusetts in near normal conditions, which is an improvement over the last few maps they've produced showing the state in abnormally dry conditions.
- Standardized precipitation indices show Massachusetts as being moderately to very dry, but the longer-term maps show the state in normal to moderately dry conditions. This seems to have been a short-term problem and we hope it is resolved.
- April precipitation so far has been 2.5 inches and there is more rain in the forecast for next week. There is a potential for more flooding. The long range forecast through April 21st is for normal temperatures and normal to above normal precipitation.
- Pelczarski noted that Pentucket Pond in Georgetown rose by 6 feet as a result of the recent rain storms, and downtown Peabody was flooded.

Honkonen gave the Executive Director's Report:

- The first meeting of the water policy task force was held yesterday. There is an interesting mix of individuals on the task force. Honkonen will send the WRC the list of task force members. The charge the task force has been given is to develop recommendations for a variety of conditions and concerns for water policy in Massachusetts within the next 3-6 months. The task force has been broken into several subcommittees to develop initial concerns. The subcommittees will bring these concerns back to the entire task force for discussion. The policy will then go out for public comment. It is expected that the public comment period will be mid-June through mid-July. The policy recommendations will be completed before the end of August. The four subcommittees are structured around resource protection, streamflow, existing permits and regulations, and ecosystems. A website will be developed to post this information publicly.
- Slow but sure progress is being made in filling the three public member vacancies. The Secretary has considered 12 appointees and has looked at two current members being reappointed. She is trying to set up interviews with those individuals to confirm their interest

and then send these recommendations to the Governor's office. The third individual, representing the ground water industry, is still being reviewed.

- The streamflow task force met yesterday as well. The next meeting is April 21st. There has been a good turnout, about 40 people representing a wide range of interests. The task force is focusing on the science of streamflow and not getting into policy discussions. It is aiming to define streamflow needs. The task force will also define what streamflow standards are not. As part of this, the task force is reviewing streamflow standards in other New England states. The next meeting will focus on the research being conducted by USGS. Some of the key concepts the task force is working with: other New England states have tried a range of methods, usually focusing on the monthly hydrograph. The standards should retain natural flow variability and do away with a single minimum flow. Most efforts have resulted in interim flow numbers that are being studied further or piloted in designated basins. The literature emphasizes the importance of accurately characterizing a river's functions and the hydrograph needed to maintain these functions. The timeframe is to complete the literature review by May and to develop interim standards in May and June.

Agenda Item #2: Presentation – The Office of Commonwealth Development

McCarthy said that the Office of Commonwealth Development (OCD) was a brainchild of Governor Romney and Doug Foy, who now heads the office. They have defined the mission of the agency as caring for the built and natural environment by promoting smart growth, through the integration of energy, environment, housing, and transportation policies, programs and regulations, as well as guiding the strategic investments of those agencies. The administration developed a structure within the Governor's office by dividing the cabinet into a couple of pieces: Economic Development and OCD, which consists of the Executive Office of Environmental Affairs, the Executive Office of Transportation and Construction, the Department of Housing and Community Development and the Division of Energy Resources. The idea is that the integration of these programs is a key component in the Governor's initiative to promote smart growth. The difference with this structure is its transparency. There will be an opportunity for public input into how OCD is operating and how successful it is. This gives an unprecedented look into the functioning of the highest level of policy development in the state. The legislature created this as a coordinating council, rather than an office. This gave us the opportunity to bring in representatives different constituency groups. Foy chairs this council.

OCD's approach to smart growth is three-fold:

1. Talk about smart growth: what it is/what it isn't
2. Focus individual state investments smartly
3. Plan and regulate in a strategic way so there are no conflicts between/among agencies.

OCD is located on the 10th floor of the Saltonstall Building. Every week, Foy meets with the Secretaries of the OCD agencies. A joint operating and capital budget was developed. This is to avoid duplication and promote coordination. A conference with the senior staff of all these agencies was held in order to grow the cross agency fertilization that will make this partnership successful. A list of sustainable development principles was published. We want to make sure that we are not taking land that is better suited for housing development and putting it into open space opportunity. Resources should be put into areas where there is actually development

pressure. A sustainable development team has been formed to coordinate at a level a bit lower than senior staff.

Other Initiatives by OCD:

- The transit oriented development initiative is very creative and can benefit the agencies tremendously. The idea is to let people know that whenever a transit system is being put in, the areas in the vicinity increase in property value. This will guide development and pay for the transit system. This opens up opportunities for the municipal, state and private developers and creates opportunities for public-private partnerships.
- A fix-it-first policy has been instituted. The state has to stop committing to expansion if it can't maintain what it has now. This includes natural resource restoration.
- There will be a \$3 million grant solicitation to promote housing.
- Commonwealth Capital: OCD agencies have a lot of money that is granted to municipalities for a variety of programs. This money should be used to leverage additional partnerships at the local level to promote smart growth. Priority will be given to communities that reflect state priorities.
- Planning and regulating smartly: objective criteria for transportation programs is being developed. Clear decisions should be based on clear criteria. This will assure that decisions are made fairly and equitably.
- The Massachusetts Highway Design Manual is being overhauled to provide opportunities to enhance pedestrian and bike access.
- A 40B task force has been convened that provided recommendations to the legislature.
- Brownfields efforts: smart growth is not where you don't want to build, but where you can build. The state has to carefully look at places that can be redeveloped and in-filled.

Honkonen stated that the WRC was interested in the intersection between what the Commission does and what OCD is doing and its priorities. McCarthy said she had read the notes from the July retreat and thought they were excellent. But there is a different mindset in other agencies. What the WRC does is very helpful as a model for other agencies. Cohen asked about the avenues to transparency that OCD is hoping to open. McCarthy replied that the meetings of the coordinating council are open, but they haven't been well attended. Agencies themselves are responsible for informing their constituencies. OCD is responsible for making sure that in the development of environmental policy, other agencies are being brought in.

In the next few months, OCD will kick off the Commonwealth Capital Campaign to inform everyone about the program.

It was asked how water availability factors into smart growth. McCarthy answered that natural resources are the reason why smart growth is important. Low impact development and water conservation should be part of smart growth. Kearns asked about regional water supplies, and McCarthy answered that growth should be consistent with regional plans. Extra points are given under the Commonwealth Capital program for regional development. Pelczarski suggested that all this smart growth may put pressure on the ocean with more desalinization plants being developed. McCarthy acknowledged this and said that she agreed with the conditions that the WRC placed on Brockton and Aquaria. If communities are moving towards a desalinization plant, those communities should go through the most rigorous conditions the state has, relative to

water conservation. We can't make the mistake that was made in the Ipswich basin. The state should reconsider all the water that communities have "by right".

Agenda Item #3: Vote – Minutes of January and February 2002

V O T E	Giles moves with a second by Contreas to approve the minutes of January 2002.
	The vote was four in favor with 2 abstentions.

V O T E	Giles moved with a second by Contreas to approve the minutes of February 2002.
	The vote was five in favor with 1 abstention.

Agenda Item #4: Vote – Completeness of Reading's Interbasin Transfer Application to Join the MWRA Water Works System

Drury acknowledged Reading's representatives and Heidell from the MWRA. Reading is proposing to join the MWRA and purchase up to 1.2 mgd to supplement its existing sources. The application was part of the EIR process. The Secretary's certificate was issued in October 2003. Reading is in the Ipswich River basin. It also has land area in the North Coastal basin and the Mystic River subbasin of the Boston Harbor basin. MWRA's sources are located in the Chicopee River basin and the Nashua River basin. The town has nine sources, all within the Ipswich River basin, with a combined capacity of 8.36 mgd. Reading is proposing to purchase MWRA water during the months from May through October, when use of the existing sources has impacts on the Ipswich River. This application was reviewed by the EOEA agencies. Staff is recommending that all the information needed to conduct a review under the ITA provided.

Drury stated that she had received a memo from WSCAC just before this meeting. WSCAC has raised several issues about the application. A main point they raise is that this is not an approved use of the ITA. Staff's position is that the Act is silent on how the water is used, except in so far that it is used efficiently. WSCAC also says that water shouldn't be used to supplement sources, but the WRC has precedent with other approvals, specifically Bedford and Stoughton. WSCAC correctly says that Reading has excess capacity and is under its Water Management Act registration. However, given the state of the Ipswich River, and the fact that Reading is proposing to reduce use of its sources to prevent environmental damage to the Ipswich River, and in light of DEP's new WMA policy, Staff will be looking at how the use or non-use of the Town's sources should be analyzed in reference to Criterion #2, viable local sources. Staff agrees with WSCAC that the ITA was not set up as a tool for restoration; however Staff believe that an application should be evaluated against the applicable criteria of the Act.

Contreas said that she didn't think it was appropriate for WSCAC to raise this issue at this time. It should be brought up during the public comment period. Drury said that WSCAC is asking that the WRC table this application, but Drury urged the WRC not to do this. WSCAC also states that this application should wait until the larger plan for the Ipswich basin is underway. Drury reminded the Commission that it had experience in trying to get communities to work

together and it did not work out, so she urged the WRC not to hold Reading hostage to having this plan completed. Gildesgame said that by voting to accept the application as complete, the WRC is not passing judgment on the project. He thinks that the issue WSCAC is raising is, "Is restoration a valid reason to apply?", but, he reminded the Commission that the Act is silent on this issue, and therefore there is no reason for the Commission not to accept the application as complete.

Drury noted that there were some outstanding issues raised which are beyond the jurisdiction of the ITA. She reminded the WRC of the Stoughton decision. One of things the WRC required was that MWRA provide information on any changes that could be made to improve habitat or flows downstream from both the Winsor and Wachusett dams. MWRA and DCR Watershed Division have proposed to work with DFG to improve stream channel habitat downstream. There are still some on-going discussions. Tisa added that DFG had long-standing concerns about the releases from Winsor dam and the effects downstream. There is an important cold-water fishery downstream of the dam. DFG will be having discussions with MWRA and DCR on these concerns. We will work closely together to see if we can improve habitat. McGinn said that DCR was looking forward to working with DFG and MWRA to work out appropriate flow assistance. DCR has already done a lot of flow habitat projects downstream and DCR is committed to continue working with DFG.

McIntire said that Reading has been working long and hard to get to this point and that WSCAC's letter contains some inaccuracies. He thanked the Staff for their work. Drury said that Staff was in the process of setting up the public hearings, which should be held in mid-May. She will keep the Commission informed and reminded them that they were invited to attend.

V	McGinn moved with a second by Giles to approve the Staff Recommendation to find as complete Reading’s Interbasin Transfer application to join the MWRA Water Works system.
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	The vote was unanimous of those present and voting.

Agenda Item #5: Update – The Water Assets Project

Honkonen reminded the WRC that they've heard several updates on this project already. Cohen recapped the activities on the community level, but said that the main point she wanted to discuss today was the concept of the regional level. She is looking for WRC input into the format of the regional reports.

Cohen recapped the purpose of the water assets project. The project focuses on 131 communities in ten watersheds along the I-495 beltway. It does not include MWRA communities, Boston, the Ipswich Basin, or North and South Coastal watersheds. The overall objectives are to provide information on existing and potential water resources and compare these to current and potential (build-out) water demands, and to foster pro-active water supply planning and protection of water supply areas and ecosystem functions, although this study is not providing new information about ecosystem needs.

Earth Tech is collecting information on suppliers and the components of the system: the service area of each system, service population; withdrawal and treatment capacity; regulatory limits

(annual, daily, Zone II limits); use patterns. The project is also looking at demands: average day demands during the peak month and customer breakdown (commercial/industrial/residential). There is also a brief look at conservation practices. At the community level, the average demand, the peak demand and permit limits were compared on an annual basis. Average day during the peak month was also examined. There are additional analyses at the community level to determine the physical and regulatory limits of the systems. The project is also looking at enhanced conservation and how it could help the community. Giles asked if this had modeling capacity for communities. If they modeled certain metrics, could they use it for water supply planning? Cohen replied this could only be done for the metric of reduced gpcd.

The product to be given to the communities is a report summarizing the statistics described above and a series of maps. The first map displays existing land use within Zone II's and Zone B's, land protected or constrained from development, and land that is still developable. The second map displays "potential future land use" in the areas designated as developable in the first map, based on zoning. The third map shows how much land in the community could potentially meet new source approval requirements, based on surrounding land use. These land areas are overlaid with aquifers, with core terrestrial habitat, with core aquatic habitat, and with wetlands and riparian corridors to assist in early pre-screening of some of the areas for appropriateness for water supply development. Any exploration for new supply areas would require specific on-site analysis, as always. The fourth and fifth maps show existing land use, and potential future land use based on zoning, within the land areas identified on Map 3 as potential future groundwater supply areas. The take home message is to start thinking about future water supplies

Cohen distributed the outline for the regional report, which listed the regional analyses being considered for WRC input. The regional report will be the one report for the entire study, with a chapter for each watershed. There will be a general introduction to the watershed that will provide basin land area and population by watershed. The land area in the watershed that is served by public water supply and type of water supply (ground water or surface water) and the basin stress levels will be delineated. There will be several maps in the report. The same types of questions asked of the communities will be asked for the watersheds, to look at cumulative impacts. This will allow us to look at the community issues in a regional context. What is total demand on the watershed? What portion of the demand is being met by sources within the watershed? What additional demand is being placed on the system from smaller systems? What are the regulatory limits placed on sources in the watershed? These reports will also look at environmental considerations, how water moves into and out of the basin, and sources that are disconnected from the service area location. This project looks only at the water supply side. It does not address the movement of wastewater. Pelczarski asked if the project was collecting information on recharge versus non-recharge areas. Cohen answered, no, but this has been raised as a possible next step. She added that conservation data will be analyzed by watershed. Giles said that we should look at different levels for residential gpcd, and not just leave it at 65. Lower values should be considered.

The study will examine the total area of land in Zones II or B, and how much is developable and how much land in the basin might meet the new source approval requirements, based solely on land use. Giles suggested using the pervious versus impervious layer on GIS as a tool, rather than using all the land uses. This is an important element for water supply. Gildesgame suggested that Cohen check with Gartland about this data layer. Gartland had been investigating use of this layer and there was some concern about its accuracy. Marler said that analysis

seemed to focus on new ground water sources, even in area where the dominant source of existing supply was surface water. There does not seem to be a focus on new surface water sources. Cohen replied that this is because any new surface water source would be a new reservoir, and the study does not have the capacity to identify new reservoir sites.

Giles asked about water quality and whether the study includes non-drinking water supply resources. There are lots of other issues that have to do with what a community wants to do with their resources. Cohen replied that this is strictly a drinking water supply assessment. Giles stated that this should be included, as should the wastewater component. Kearns asked if the project was going to look at how zoning changes may impact water assets. Cohen replied that the project was dealing with current zoning. Kearns added that perhaps one town could be used as an example. Giles suggested that ultimately having something similar to what the estuary project is developing that allows towns to change variables to determine what they might need under different scenarios would be helpful. Cohen said she'd run that suggestion by the technical advisory committee. However, this could raise red flags about snob zoning, etc. Towns will be given the data, but they will not be given the full modeling capability. Giles stated that if a build-out demand number is published, communities are going to think that this is what they need and they are going to immediately run out and try to obtain the supply to meet the demand. Communities should be given different options. This is the problem with not including wastewater. Towns could be using wastewater recharge as an option. Cohen reminded the Commission that the community analyses can't be changed at this point in time. There are two months left to complete the reports.

The regional study will also look at interactions and interdependencies: water supplies that have water sources solely in other communities and do not have control over the land use decisions. Another issue to be looked at is purchases and sales, to determine how water is moving within and between basins. Daily demands in terms of capacity will be examined. Pelczarski asked if data on past water emergencies will be collected. Cohen replied that this would be interesting, however, we don't have the resources to do this.

The study will ask "What are the critical, large regionally important resources?" There are large aquifers that are serving several suppliers. Also it will look at what public water suppliers are serving multiple communities. Is there undeveloped land over aquifers that should be protected on a regional basis?

Build-out demands will be examined, as will total cumulative planned capacity. Planned facilities are those that have had a pumping test and are actually in the planning phase. The study may also collect statistics on future development relative to the existing service territories. How much land currently undeveloped is within existing service areas? Will the service areas need to be expanded? This would be looked at in terms of smart growth. Giles suggested that storm water should be added because water quality and water quantity issues can be addressed at the same time. Cohen said we need to work within the scope of the project.

The lessons learned here will be used to study the rest of the state and better refine water budgets, including wastewater. This may be piloted in the basins used in this study because half of the information has already been collected. We are also looking at differences between different regions of the state. EOEA wants to build more of these studies into the capital budget.

Pelczarski asked about data storage. Cohen answered that there is a DEP database that is being used. MAGIS will also have a copy of the database and these will be shared. Any sensitive data will not be placed in the database. Pelczarski asked if there are uses for this information, other than the water assets study. For instance if there is another drought, it would be helpful to know where the emergency hookups are located.

Tisa stated that when the water assets project was first proposed, he was concerned about how this information would be used and interpreted by the public. He is concerned that communities will review the report and think that the only water worth protecting is drinking water. Calling this water assets gives the wrong impression. It is not really a water asset, it is a drinking water asset. How will this be presented to communities? Cohen stated that communities will get a printed report and there will be regional sessions to discuss the report. Cohen tried to include a lot of explanatory language right at the beginning of the reports to explain what the reports should be used for. She does not think the emphasis of the report will be that communities should be developing new water supplies. She suggested that Tisa review the draft reports. During the course of the project, the emphasis has always been on water supply, but Cohen agreed that the name of the project was unfortunate. Tisa stated that what state officials understand and what a community understands are two different things. Gildesgame suggested that the reports be prefaced to make it clear that water supply is only one aspect of water resources. Biological aspects have been included as resources to look at. Cohen said there is nothing in the reports that is pro-development. In fact, because of the emphasis on protecting potential water supplies, there has been criticism that this report is anti-development. Cohen wants to identify opportunities for a “roll-out” for these reports, however, this has not been budgeted for or planned. She would like to reconvene the regional meetings that were held in the earlier stages of this project, but there is a lack of funding and staff for this.

Tisa asked where the pressure is coming to get these community reports out. He thought this was a WRC-driven project. Cohen said that the original EOEa budget and contract for the project determined when these reports would come out and the Secretary’s office, which is overseeing the project, is sticking to this timeline, in order to be able to ask for funding for the second part of this project. Tisa suggested that the WRC be given a draft of the reports. There are a number of pieces, such as stressed basins and streamflow policy, that go with this project. It needs to be discussed in that context.

New Business

Giles brought a copy of the new DEP Water Management Act policy and guidance.

Meeting adjourned

Meeting minutes approved 12/9/04